CORE
Metadata, citation and similar papers at core.ac.uk
Provided by Elsevier - Publisher Connector

Endophthalmitis

D. Lau[1], L. Lok[2], M. Ferdinands[2], P.J. Allen[2], R.O. Fullinfaw[3], G.E. Davies[2], D.C.M. Kong[4,*]

[1] *Eastern Health, Box Hill, Australia*
[2] *Royal Victorian Eye and Ear Hospital, East Melbourne, Australia*
[3] *Royal Melbourne Hospital, Parkville, Australia*
[4] *Monash University, Parkville, Australia*

Background: Managing fungal infections involving deeper ocular structures such as fungal endophthalmitis remains a challenge whereby patients with fungal endophthalmitis often have a poor visual outcome. Indeed, alternative treatments are needed. We investigated the feasibility of using topically applied voriconazole in the management of fungal endophthalmitis.

Methods: In a prospective open label study, 10 participants were recruited from patients scheduled to undergo elective, posterior segment surgery. Participants received topical 1% voriconazole solution, preserved with 0.01% benzalkonium chloride, hourly for 4 doses or four times a day (qid) for 3 days. Vitreous humour was removed during surgery and analysed by HPLC.

Results: The mean voriconazole concentration after hourly dosing ($n = 5$) was $0.4 \pm 0.4\,\mu g/mL$ and the mean sampling time was 2.2 ± 1.9 h. Almost all the voriconazole concentrations from the qid regimen ($n = 5$) were < 0.1 μg/mL. Discussion: The data suggest that hourly dosing is likely to give adequate concentration required to treat infections associated with most *Candida* species but not *Aspergillus* or *Fusarium* species.

Conclusion: Topical application of 1% voriconazole eye drops is able to penetrate into the vitreous humour and may be useful as an adjunct to intra-vitreal and systemic voriconazole in the treatment of fungal endophthalmitis.

doi:10.1016/j.ijid.2008.05.752

45.011

Population Pharmacokinetics of Itraconazole Solution Used as Prophylaxis for Febrile Neutropenia

M. Yamashita*, Y. Kanbayashi, M. Ohshiro, Y. Morimoto, K. Nomura, Y. Fujimoto, Y. Matsumoto, M. Taniwaki

Kyoto Prefectural University of Medicine, Kyoto, Japan

Background: Although administration of antifungal agents, such as itraconazole (ITC) solution, for prophylaxis is the most promising strategy for the treatment of haematological malignancies, little is known about the population pharmacokinetic (PK) parameters. Subjects and Methods: A clinical study was conducted to identify PK parameters for the administration of 200 mg/day ITC solution used as prophylaxis for febrile neutropenia in patients undergoing treatment. The study population comprised six patients. NONMEM software was used to estimate PK parameters.

Results: Clearance, volume of distribution and the absorption rate constant were 12.7 L/h, 333 L and 1.72 h-1, respectively. Assuming a normal distribution, we predicted administration of 200 mg/day might be suitable for prophylaxis.

Conclusion: These parameters were different from a previous study to large extent, which may be due to differences in intended patients. These differences strongly suggest that establishment of population pharmacokinetics is essential for planning a prospective clinical trial. This pilot study presents a basic PK model of ITC solution in Japanese haematological patients for the establishment of optimal administration.

doi:10.1016/j.ijid.2008.05.753

45.012

Sensitivity of Yeast Strains from Candida Genus to Fluconazole and Voriconazole

V. Badea[1,*], T.N. Parjol[2], V. Braga[1], F.C. Badea[1]

[1] *The Faculty of Dentistry,Ovidius University, Constantza, Romania*
[2] *The Faculty of Pharmacy, Ovidius University, Constantza, Romania*

A renewed outbreak of fungal infections has been noticed in recent years related to the increased number of patients hospitalised at the University Hospital Constantza and susceptibility of this strains to fluconazole and voriconazole Methods and Materials: The pathological specimens (sputum, swabs from throat and oral cavity, urine drains, cervical secretions) has been growth on sabouroud medium; stained smears were microscopically examinated for yeasts. The isolated species were identified by api 32c (bio-merieux). Fungigrame was made on mueller hinton medium supplied with gam (glucose and blue methylene)

Results: We isolated 150 fungal strains from 1.01.2007—1.01.2008. *Candida albicans* was isolated in 64% strains, *candida paralopsis* 16%; *candida glabratra* 8%; *candida krusei* 10%; *candida tropicalis* 2%. The *candida albicans* strains were sensitive to fluconazole 68% and sensitive to voriconazole in 88%.

Conclusions: 1. The most isolated strains was representated by strains of *candida albicans*. 2. The strains of *candida albicans* have a lower sensitivity to fluconazole (68%) and the higher sensitivity at voriconazole (88%) 3.75% of resistant strains to fluconazole has been sensitive to voriconazole.

doi:10.1016/j.ijid.2008.05.754

45.013

Comparative Study of Tinea Pedis and Onychomycosis Between Type 2 Diabetic Patients and a Non-Diabetic Control Group in the Northern Iran

A. Nasrollahi Omran*, M. Ghiaci Mansori, M. Poya, M. Dorafshan, S. Mhammadi Nkhjiri

Islamic Azad University of Tonekabon Branch, Tonekabon, Iran (Islamic Republic of)

Background: The number of individuals diagnosed with diabetes mellitus is increasing worldwide. Controversy